



INDIAN INSTITUTE OF TECHNOLOGY BOMBAY

MATERIALS MANAGEMENT DIVISION

Powai, Mumbai 400076.

Item Description:

PR No. 1000049155

RFx NO.6100002306

Sr. No	Item description	Detailed technical specifications	Technical compliance (YES/NO)	Additional information (if any)
1	Supply and installation of InGaAs detector with water chiller for existing spectrometer			
	Sensor:	InGaAs		
	Active pixels:	512 (512 x 1 pixels for spectroscopy)		
	Pixel size (W x H):	25 x 500 μm		
	Maximum cooling:	-90°C or better with cooling accessory		
	Wavelength range:	600 nm - 1.7 μm		
	Quantum efficiency:	Greater than 80% in 1 - 1.6 micron range		
	System window type:	UV-grade fused silica, Broadband VUV-NIR		
	Digitization:	16 bit		
	Dark current:	$\leq 11 \text{ ke-}/\text{pixel}/\text{sec}$		
	Read noise:	600 e- or better		
	Linearity:	Better than 99%		
	Interface:	USB		
	Mounting Flange:	Appropriate flange for mounting detector to existing Spectrometer model: KYMERA-328I-D2-SIL		
	Water chiller with suitable tubings:	Compatible water chiller to cool CCD to -90°C		

	Chiller compatibility:	The chiller should be compatible with existing similar make ccd/emccd		
	Software:	The offered CCD should communicate with existing spectrometer software and should be able to capture spectral data.		
	Installation & Training:	The CCD should be coupled with existing spectrometer and operation should be demonstrated by authorized engineers on site during installation.		
	Test reports and demo	Factory test report needs to be provided for the above specs and the authorized engineer should demonstrate these specs during installation.		
	Warranty:	1 Year		
	Delivery period:	Within 30 days		